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## ABSTRACT

Title VII Project PIAGET (Promoting Intellectual Adaptation Given Experiential Transforming) is a bilingual early childhood and parent program serving young bilingual children, ages 2 to 8, and their parents. It is an Academic Excellence model and is targeted for adopting agencies in Pennsylvania, New Jersey, New York, and the New England States and also is disseminated to other agencies in the states of Michigan and Washington. Agencies working with young children in group settings that have adopted the program are local public school districts, parochial school districts, preschools, day care and nursery programs, and federally funded preschool programs such as Head Start and migrant education programs. The project rests on 2 aspects: (1) theoretical foundations, and (2) research results. Its theoretical foundations are based largely on Piaget's research and writing describing children's acquisition of cognitive and language systems. Research results are from studies on young bilingual children's and parent's growth and are consistent year to year from 1981 to present. The successes of the project can be explained by its twin components of classroom and home programming. A description of each is included. (Author/AB)

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# **P.I.A.G.E.T. CLASSROOM AND HOME PROGRAMS FOR YOUNG BILINGUAL CHILDREN AND THEIR PARENTS**

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# Title VII Project P.I.A.G.E.T.: ESL/ Bilingual Programs for Young Children and Their Families

## Introduction

Title VII Project P.I.A.G.E.T. (Promoting Intellectual Adaptation Given Experiential Transforming) is a bilingual early childhood and parent program serving young bilingual children, ages two to eight, and their parents. It is an Academic Excellence model and is targeted for adopting agencies in Pennsylvania, New Jersey, New York, and the New England States and also is disseminated to other agencies in the states of Michigan and Washington. As an Academic Excellence Model, P.I.A.G.E.T. Project provides "promising practices and programs" through dissemination and adoption. More formally,

"The term 'programs of academic excellence' means programs of transitional bilingual education, developmental bilingual education, or special alternative instruction which have an established record of providing effective, academically excellent instruction and which are designed to serve is models of exemplary bilingual education programs and to facilitate the dissemination of effective bilingual educational practices (Fy 1987 Application for . . . Projects, 1987, p. 26)."

Bilingual programs under United States Public Law 98-511 (October 19, 1984) serve ". . . growing numbers of children of limited English proficiency . . . [who] . . . have a cultural heritage which differs from that of English proficient persons . . . (Fy 1987 Application for . . . Projects, 1987, p. 23)." Thus, bilingual programs in the United States serve primarily children who speak

languages other than English in home and community settings and the focus is to develop their English language capacities while at the same time expand their native languages and cultural heritages (Fy 1987 Application for . . . Projects, 1987, p. 23).

One of the major goals of Title VII Project P.I.A.G.E.T. is to disseminate and “. . . implement the P.I.A.G.E.T. Dissemination Program with its singular focus on adoption in identified areas, Yawkey, 1987, p. Reference K).” Agencies working with young bilingual children in group settings which have adopted the P.I.A.G.E.T. program are local public school districts, parochial school districts, preschools, day care and nursery programs, federally funded preschool programs such as Head Start and migrant education programs. Examples of various agencies which have adopted the program, children’s ages, and language groups served include:

1. Public Schools in Bethlehem, Pennsylvania; five years olds and serves the Spanish language group. The Bethlehem Area School District is also the home, parent, and chief demonstration site where observation and training may occur for staff of adopting agencies.
2. Public Schools in Portland, Maine: three and four year old children and serves Cambodian (Khmer), Vietnamese, Russian and Polish languages;
3. Migrant Program of the Commonwealth of Pennsylvania, New Oxford, Pennsylvania; three to five year old children and serves Haitian (i.e., French-Creole) and Spanish languages;
4. Parochial Schools, Diocese of Allentown, Pennsylvania; four and five year old children and serves Spanish and Portuguese languages;

5. Community Education and International English Program in Grand Rapids, Michigan; three to five year old children and serves Korean, Chinese, Vietnamese and Spanish languages, and
6. Federally-funded bilingual preschool program in Tacoma, Washington; three and four year old children and serves the Cambodian (Khmer) language.

Project P.I.A.G.E.T. rests on two aspects: (a) theoretical foundations, and (b ) research results. Its theoretical foundations are based largely on Piaget's (1962, 1963, 1965, 1969) research and writing describing children's acquisition of cognitive and language systems. From Piaget's writings it is assumed that:

1. mental concepts will influence English language growth in bilingual children whose dominant language is not English,
2. emotive, affective, and other cognitive structures evolve within supporting social settings of positive child-child and child-adult interactions,
3. concrete materials and experiences rather than verbal, didactic instruction and in social context rather than isolation facilitate the young child's cognitive and language growth,
4. cognitive and language development and more specifically symbolization are interrelated and actively constructed by the young child rather than passively receiving them from the adult, and
5. parents and "significant others" including the extended family impact children's development and through modeling and imitating can be shown how to work constructively with their children in home settings.

These theoretical foundations and assumptions basic to the P.I.A.G.E.T. program are detailed elsewhere (Peters, Neisworth & Yawkey, 1985, Yawkey, 1987a, 1987b).

The second aspect is results of P.I.A.G.E.T. research studies on young bilingual children's and parent's growth (e.g., Aponte, et al., 1986, Yawkey, 1991, Yawkey, Facchiano & Nivette, as submitters, 1991). From 1981 to the present, the results of the P.I.A.G.E.T. program are consistent year to year and are summarized below (Aponte, et al., 1986, Yawkey, 1987a, 1991).

1. P.I.A.G.E.T. children at post test time received significantly ( $p < .01$ ) higher scores than comparison group bilingual children at the same time period on English language receptive and expressive communication.
2. Parents of P.I.A.G.E.T. children yielded significantly ( $p < .01$ ) higher scores at post test time than comparison group bilingual parents at the same time period on positive perceptions and attitudes toward their children's learning and growth.
3. In analyzing most recent data returns from P.I.A.G.E.T. adoption sites, the results of pre and post tests show that P.I.A.G.E.T. children received significantly ( $p < .05; .01$ ) higher post than pre test scores on English language receptive and expressive communication and that P.I.A.G.E.T. parents yielded significantly ( $p < .05; .01$ ) higher post than pre test scores on positive perceptions and attitudes toward their children's learning and growth (Yawkey, 1991).

From theoretical and research perspectives and across parent and adoption sites, the P.I.A.G.E.T. program impacts children's English language and conceptual growth and parent's attitudes and perceptions toward their children's learning and development.

The successes of Project P.I.A.G.E.T. can be explained by its twin components of classroom and home programming. A description of each follows.

### P.I.A.G.E.T.'s Classroom Component

This classroom component focuses on the following three main goals (Yawkey, 1987a). They are to:

1. develop and increase young bilingual children's receptive and expressive English language communication and extend their native languages and cultures,
2. increase their knowledge about their physical and social environments, and
3. increase their positive feelings about themselves and in the activities they perform with their children.

These three goals are implemented by key elements of the P.I.A.G.E.T. Classroom Component: curriculum, instructional strategies used by the staff, Daily Activity Plans and Daily Observation Cards, and monitoring. These elements are explained in the following paragraphs.

### Curriculum

The P.I.A.G.E.T. Curriculum consists of 202 major concepts for young bilingual children, preschool to grade 3. A breakdown of these concepts by age/grade levels and number of curricular concepts follows:

1. two to three year olds, 40 major concepts (preschool level),
2. four to five year olds, 60 major concepts (preschool and kindergarten levels), and
3. six to eight year olds, 102 major concepts (grades one to three).

However, given the children's conceptual levels and integrated nature of the curriculum, younger children may be able to work well with more advanced

curricular concepts and older children may perform capably at less advanced ones. The age/grade levels and numbers of concepts serve as guides to adopting agency's planning and follow through of curriculum development.

The P.I.A.G.E.T. Classroom Curriculum as organized by subject areas and themes (Title VII Staff of Project P.A.L.S., Garcia & Yawkey, 1987). With both subject area and theme organization, the adopting agencies can choose which format is most applicable to their situation. The organization by subject areas include (Title VII Staff of Project P.A.L.S., et al.):

1. mathematics
2. art
3. music/movement
4. cultural studies
5. physical development
6. social/emotional
7. science
8. language

With the theme organization, several examples follow (Title VII Staff of Project P.A.L.S. et al.):

1. self
2. family and community
3. transportation
4. seasons
5. weather
6. holidays
7. animals
8. plants



Some examples of curriculum concepts include:

1. rate counting in English from zero onward
2. identifying numerals in native language from zero onward
3. exploring and experimenting with various art media
4. performing dances from various cultures
5. describing community helpers, their jobs and responsibilities
6. returning toys and other learning materials after using them
7. talking about various weather conditions
8. using verb tenses

The scope of the curriculum shows richness and depth of potential conceptual and language growth. In addition, these major curricular concepts become planning guides and benchmarks for classroom staff and children. Then, too, these curriculum and concepts can be modified by adopting agencies to assist them in their development and implementation of sound, effective curricular practices. Further, the order in which these curricular concepts are introduced depend on the young bilingual children's conceptual level, agency's staff and parent's input. Finally, the curriculum concepts are devised to show progress children and classroom staff make throughout the year. For this purpose, progress checklists are built into the curriculum. Classroom staff check in columns when the concepts are first introduced (e.g., mouth, season) and use a second check to show when the concepts are mastered. This progress checklist provides an on-going formative evaluation of curriculum planning, teaching, learning and mastery. The curriculum is anchored in the P.I.A.G.E.T. classroom in three ways or modes which identify the remaining key elements (Yawkey, 1987a).

### Instructional Strategies

This second major key element is a mode by which the P.I.A.G.E.T. Curriculum is implemented in the classroom. These instructional strategies show classroom teachers and aides “how” to teach, guide and develop language and mental concepts in young bilingual children. The following figure lists the major teaching strategies (Yawkey, 1990).

Examples and uses of two of these strategies illustrate what they are and how they are used. The two strategies, as examples, are strategy numbers one and five (see Figure 1).

For strategy number one, “Determine Cognitive Developmental Levels,” the classroom staff tries to understand the young bilingual children’s current levels of language and conceptual growth. In understanding their current levels, the P.I.A.G.E.T. staff can be better able to assist and guide their growth through individual, small and large group activities.

One example of implementing this strategy is for the staff “to watch how children use their bodies to represent actions and movements.” For example, the staff observes children’s mental/verbal actions and movements as they say and do finger play games, sing and dance to records and cultural songs. As the children say and do these activities and show difficulty perhaps in coordinating their bodies with spoken words, this observation may imply to the P.I.A.G.E.T. staff that these children are operating at the index level of conceptual and language growth. The index level suggests additional, active experiences where children have opportunities to coordinate using language with objects (Peters, Neisworth & Yawkey, 1985). If children show no difficulty in coordinating actions, this observation to the P.I.A.G.E.T. staff may imply that these children in these activities are conceptualizing and using language and movements at the symbol level (Peters, Neisworth & Yawkey, 1985).

A second example of using this strategy is observing how well children use common, familiar objects to represent other objects. As children play or are involved in adult-guided activities, can they, for example, use “crayons for airplanes,” “cardboard boxes for cars,” and “toy soldiers for dinosaurs.” If difficulties are observed, this may imply to the P.I.A.G.E.T. staff that these children are operating at the index level in performing these activities (Peters, Neisworth & Yawkey, 1985). The children may be operating at the sign level in these activity (Peters, Neisworth & Yawkey, 1958).

For strategy number five (See Figure 1), “Use Concrete Objects for Language and Conceptual Growth,” the classroom staff understand that concrete objects rather than verbal, oral statements, instruction and verbal adult-child communication assist language and conceptual growth. A major developmental principle of Piaget’s cognitive theory is that young children’s growth evolves through their interactions with concrete, familiar objects (Peters, Neisworth & Yawkey, 1985).

One example of implementing this strategy is to provide children with concrete objects for use in their activities. Relatedly, P.I.A.G.E.T. staff learn to guide children’s language and conceptual growth through concrete objects and urging children to use and interact with these objects. These objects in addition serve to motivate children and stimulate and develop their thought and language.

A second example of using strategy number five is for P.I.A.G.E.T. staff to examine their classroom environment to determine whether there are varieties of materials for children to use. A useful approach to determine object variety is to establish whether objects in the classroom represent four categories or groups (Yawkey & Trostle, 1938). For classroom examination purposes, these useful categories are: instructional, constructional, and real objects and toys. In

surveying the P.I.A.G.E.T. classroom staff determine whether there are examples of objects which are:

1. skill-oriented, closed-ended, and convergent objects (i.e., instructional),
2. open-ended and divergent with children determining outcomes (i.e., constructional),
3. adult objects used by children (i.e., real materials), and
4. miniature replicas of real objects made for children (i.e., toys).

As a result of this survey, P.I.A.G.E.T. teachers may wish to add objects of particular categories and select those that match better the child and/or adult initiated activities (Yawkey & Trostle, 1983).

#### Daily Activity Plans/Daily Observation Cards

The third major key element of the P.I.A.G.E.T. program and the second way or mode of anchoring the curriculum is the Daily Activity Plan (DAP) and Daily Observation Card (DOC). Both modes are explained below.

DAP. The DAP is a tool used by P.I.A.G.E.T. staff to plan and implement activities in the classroom (Peters, Neisworth & Yawkey, 1985, p. 274-276) has the following characteristics:

1. The DAP emphasizes integration of learning experiences for young bilingual children.
2. It shows how "massed experiences" focus on a critical goal and the critical goal is completed through different materials and numerous activities -- all of which emphasize the goal.
3. The DAP stresses holistic growth processes in which activities impact language, cognitive, socio-emotional and physical development systems.

The DAP has six parts: general information, objectives, materials, presentation, extensions and evaluation (Peters, Neisworth & Yawkey, 1985, p. 274-276).

In the general information part, basic details are included such as the place of the activity, time period encompassing the activity, and number of children participating in it. If there are any special locations required for the activity, these needs are identified in this section.

The second part of the DAP focuses on objectives. The staff member identifies the major processes children use in the activity and the children's outcomes or major products. This section sets the growth expectancies -- which may be used as performance criteria against which to measure whether they are accomplished or mastered (Peters, Neisworth & Yawkey, 1985, p. 275). As major processes and products, this section provides a clear understanding of the children's thinking (Peters, Neisworth & Yawkey, 1985).

The third part of the DAP is the materials. The common materials used in the activity are identified and described. Here, Peters, Neisworth & Yawkey (1985, p. 275) note that the materials should be identified specifically, "...because the nature of the materials often determines whether or not children are able to do the activity." Familiar, common materials and objects are more preferred than novel, unfamiliar objects in learning activities because children's level of understanding is higher with the former than with the latter ones (Peters, Neisworth & Yawkey, 1985, p. 275).

The presentation is the fourth part of the DAP. This part tells how the activity is introduced to the children and sets the motivational tone for it. In addition, this part establishes steps the adults and/or children follow in doing the activity (Peters, Neisworth & Yawkey, 1985, p. 276). These steps in the procedure may be listed from easiest to more difficult as children progress with the activity.

The fifth part is the extensions (Peters, Neisworth & Yawkey, 1985). The main idea is to describe "...different ways to present the same activity to different children or at various times of the year (Peters, Neisworth & Yawkey, 1985, p. 276)."

The sixth part of the DAP is evaluation. As staff observe children perform the activity, they gather ideas on how well the children completed it. These observations are written as "comments and suggestions." In addition, the information gathered from the use of the Daily Observation Card (DOC) may be summarized in the evaluation (Peters, Neisworth & Yawkey, 1985, p. 276).

A completed example of a DAP appearing in Table 1 (see page 28) (Morales-Flores & Yawkey, 1990) shows these six parts. More detailed discussion of these DAP parts is found elsewhere (see Peters, Neisworth & Yawkey, 1985).

DOC. The DOC is a companion tool with the DAP and is used by P.I.A.G.E.T. staff to monitor and evaluate children's learning processes and products used in the activity. In P.I.A.G.E.T. programs there are six parts to the DOC: general information, objectives, names, scoring and comments (Morales-Flores & Yawkey, 1990, Peters, Neisworth & Yawkey, 1985).

In the first part of the DOC, the general information tells the knowledge or subject area in which the evaluation occurred and the title or name of the activity (Peters, Neisworth & Yawkey, 1985).

The second part of the DOC is the objectives. They describe the process and product concepts the children use in the activity. These thinking conceptualizations may include observing, predicting, classifying, and so forth. The objectives are written in columns, from left to right, across the top of the DOC. As children are observed to use various conceptualizations, the staff marks which ones the children use.

These objectives change from activity to activity. In addition, the children's level and type of involvement may change.

The third part is the list of names of children who participate in the activity. The children's names are listed consecutively on the DOC form. As children perform the activity, the staff marks the name of the child and which one or ones of the objectives he or she uses. The second and third parts of the DOC relate to the scoring.

The scoring or fourth part of the DOC is critical because it tells how well the children perform the objectives. In the P.I.A.G.E.T. program the staff uses the following mastery scale: 1 for "mastery" (above 60% level), 2 means "partial mastery" (at or below 60% level), 3 for "mastered with assistance" and 4 means "did not master" (Morales-Flores & Yawkey, 1990). Essentially, as staff observe children in activities, they mark either 1, 2, 3, or 4 beside their names and under the objective or objectives used by them. This monitoring system shows the day to day performance of the children, and it becomes an on-going record of accomplishments and progress and establishes the children's level of proficiency in using the objectives.

The fifth part of the DOC is comments (Morales-Flores & Yawkey, 1990, Peters, Neisworth & Yawkey, 1985). Comments are written by the P.I.A.G.E.T. staff who observe the children performing the activity. The comments are critical anecdotes that occurred and are written on the same line as the child's name. This part provides additional information about the children and their levels of mastery.

A completed example of a DOC appears in Table 2 (see page 29) (Morales-Flores & Yawkey, 1990). It illustrates the parts to the DOC and how they are used. A more detailed explanation of the DOC is found in Peters, Neisworth & Yawkey (1985).



### Classroom Monitoring

Monitoring is the third major key element of the P.I.A.G.E.T. classroom component and a final way or mode that anchors the curriculum. This key element focuses on documenting and evaluating performance of young bilingual children and P.I.A.G.E.T. staff. This monitoring of performance provides both on-going day-to-day as well as long-term information that is critical to documenting the impact of the project. Explanation of children's and staff's monitoring devices follows.

Children's Monitoring. Monitoring of young bilingual children's performance enrolled in the P.I.A.G.E.T. program consists of both summative or long-term, pre-post evaluation as well as day-to-day formative, short-term evaluation.

For summative evaluation, the Peabody Picture Vocabulary Test (PPVT) and Preschool Kindergarten Bilingual Inventory (PKBI) are administered.

The PPVT is an internationally recognized assessment instrument published by the American Guidance Association. It is used primarily to assess and then determine the youngster's receptive language capacities and yields scores for a number of areas, such as mental age. Reliability and validity coefficients and descriptions of results with normed native language and English speaking populations are readily available in the instructor's manual to this instrument. It is used widely with young children, 2 through 7 years old and with adults. The individual being assessed by the PPVT listens to a word and is asked to "point to" its concrete referent for the word and the response is scored "correct" or "incorrect." The total number of correct verbal-word/referent objects that the individual points to is then converted to factors such as mental age using the directions and tables outlined in the instructor's manual. The PPVT is administered in English. It takes 15 to 20 minutes to administer to each child.



The PKBI was designed by the Bethlehem Area School District's staff. It has been used with young bilingual children in Bethlehem (PA) since 1976 and was modified several times given research data. It is used to primarily screen young bilingual children for English language deficiencies and the total raw score determines whether the youngster is placed in bilingual or English-dominant classrooms. The reliability for this instrument is .95 (Yawkey, 1983b). The language areas which are measured by the PKBI are: (a) social language awareness (e.g., knowing child's name, identifying names of family members), (b) auditory language (e.g., repeating what examiner says using examples from numbers, directions), (c) visual-motor capacities (e.g., drawing and copying figures), (d) language articulation (e.g., fluency and reproduction of English sounds), (e) gross motor (e.g., hopping); and, (f) quantification (e.g., one to one correspondence). The child's responses to each of the questions are scored "successful" or "unsuccessful" based on acceptable response criteria for each question. The range of points across the total test is 1 to 191 points. This instrument was administered to the children in English and takes two hours or 120 minutes per test to administer.

For formative, day-to-day monitoring of children's performance, the Daily Observation Card (DOC) is used. (See the description of the DOC in the previous section of this paper.)

Staff's Monitoring. The monitoring of P.I.A.G.E.T. classroom teacher and aide staff is an on-going, week-to-week process. This staff monitoring procedure assures the proper uses of the P.I.A.G.E.T. teaching strategies, implementation of the curriculum and provides continuing feedback to staff. This P.I.A.G.E.T. classroom monitoring form uses systematic observation techniques for monitoring on-going verbal and nonverbal

actions of staff in social group context (Johnson, 1985c). See Figure 2 (page 31) for an example of this monitoring instrument.

From Figure 2, teacher/aide strategies appear on the left column and in listing from strategy or behavior numbered 1 to 23 and onward. Across the top of this instrument are 15 time segments or time blocks, each divided into units of 10/10. For each unit of 10/10, the rater:

1. observes for 10 seconds and then marks "checks" in the column for 10 seconds those strategies or behaviors that occurred during the 10-second observation, and
2. moves to the next column of 10/10 and repeats the same of observing for 10 seconds and recording for 10 seconds.

Summing across the 15 time segments total equals 150 seconds of observation plus 150 seconds of recording or 300 seconds or 5 minutes of monitoring time for each monitoring session. The monitoring session can be used as often as day-to-day or at regular intervals once per week.

Two scores are derived from this monitoring instrument (Johnson, 1958): total duration and total frequency. The total duration score shows the consistency of use of the same staff behaviors; that is, the number of time blocks the same behavior occurred. The total frequency score shows the number of consecutive time blocks the

In sum, P.I.A.G.E.T. curriculum, instructional strategies, DAPs and DOCs and monitoring, as key elements, have documented the effectiveness of the P.I.A.G.E.T. Program and demonstrated these elements as vital parts of the classroom components.

### P.I.A.G.E.T.'s Home Component

The home component stresses three major goals (Yawkey, 1987a). They are to:

1. train parents to become a teacher of their children in home settings through partnerships between home and school,
2. increase parent's activities with their children in home settings,
3. increase parent's positive expectations and attitudes toward their children and their learning potentials.

These goals characterize the P.I.A.G.E.T. Home Component as implemented through its key elements: Home Mastery Learning Cycle, Curriculum, Home Visit Report, and Monitoring. Each of these elements are described in the following sections.

#### Home Mastery Learning Cycle

The Home Mastery Learning Cycle (HMLC), the first key element, describes the format for the P.I.A.G.E.T. aide who works with the parents in their homes or at other more convenient locations. The five step format, titles of the steps, and projected time allotments per steps of the HMLC appear in Figure 3. (see page 32).

In Step 1, the parent tells the P.I.A.G.E.T. aide how she used the previous week's activity with her child and identifies the settings or situations in which it was used. As the parent reports, the P.I.A.G.E.T. aide is able to tell whether it was used and determines whether it was properly used with the child. Any questions about the activity are answered. Modified from Morales-Flores (1990, p. 16) (in Morales-Flores & Yawkey, 1990), an example of Step 1 for "floating and sinking" follows:

"The mother explains about last week's activity. She and her child had several sessions at home and also practiced the ...[activity]... at the grocery store."

In Step 2, the aide explains this week's activity and describes the teaching plan that the parent will use to teach the activity to her child. The aide uses specific action words (e.g., jump, pick up, color in) and puts these action words in a short teaching plan that parents can easily carry out themselves. Usually one activity with teaching plan is introduced per week. An example of Step 2 follows:

"Help your child: (a) fill up a bowl with water, (b) find and gather a wooden block, spoon, sponge, and leaf, (c) tell whether each object will float and sink, and (d) test the child's guess and ask him/her to place the object in the bowl of water (modified from Morales-Flores, 1990, p. 16 in Morales-Flores & Yawkey, 1990)."

In Step 3, the P.I.A.G.E.T. aide shows the parent what to do and models the teaching plan for the parent. The parent watches the aide model and performs the physical actions with the words outlined in the teaching plan in Step 2.

In Step 4, the parent does and says the teaching plan she saw modeled for her in Step 2. As the parent performs the plan, misunderstandings and errors are corrected and appropriate actions are noted and reinforced.

In Step 5, the aide explains how the teaching plan for "floating and sinking" can be used with her children in settings outside the home. The parent may add other settings, and she is guided to select and use, at minimum, one additional setting other than the home in which to use the plan, e.g., "floating and sinking." Modified from Morales-Flores (1990, p. 16) (in Morales-Flores & Yawkey, 1990), an example follows:

“The mother will be taking her son to a pond at a park nearby to provide the child with more practice in the skill.”

### Curriculum

The P.I.A.G.E.T. Home Curriculum (Garcia, Knieriem, Craig, Title VII Staff of Project P.I.A.G.E.T. & Yawkey, 1990) is the second key element. It contains 180 teaching plans for P.I.A.G.E.T. staff working with parents. Major characteristics of this curriculum follow (Garcia, et al., 1990):

1. The Home Curriculum matches and are cross indexed with major concepts of the Classroom Curriculum. Concepts taught by teachers and aides in the classroom are reinforced by parents in the home.
2. Each of the 180 teaching plans is formatted to the HMLC. The P.I.A.G.E.T. staff trains the parents through the HMLC to use the teaching plans.
3. The concepts in teaching plans are flexible and can be modified by the P.I.A.G.E.T. home staff and parent to match the conceptual/age levels of particular children.
4. In addition to the teaching plans used with the parents during the regular academic year, there are a number of other teaching plans that may be used by the parent in the summer months when school is not in session.

The teaching plans in the Home Curriculum, corresponding to the steps in the HMLC, are organized into several numbered sections. Together with the sections are related content, an example of a teaching plan is depicted in Figure 4 (modified from Garcia, et al., 1990, p. 1) (see page 33).

Using the Home Curriculum (Garcia, et al., 1990), the parents become directly involved with what is happening in the classroom and with their child's

education through parent as “teacher” in the home and by parents reinforcing and extending concepts taught in the classroom.

### Home Visitor Report

The Home Visitor Report (HVR), the third key element, is completed by the P.I.A.G.E.T. home staff and the parent. The staff using the HVR is responsible for:

1. establishing all objectives following the HMLC steps,
2. working with the parent to identify common household materials necessary for implementing the teaching plan and the HMLC with the parent,
3. writing down all comments and observations arising from the staff-parent training.

The parents are responsible for signing their name to the HVR that documents the:

1. beginning and ending of the staff-parent training,
2. training that occurred and whether they were satisfied with it.

From Morales-Flores (1990, p. 17) (in Morales-Flores & Yawkey, 1990), an example of a completed HVR for the concept of “floating and sinking” appears in Figure 5 (see page 34).

The HVR links the school and the home because it focuses on aide-parent partnerships in learning processes and empowers the parents and their roles as primary teachers of their children in home settings.

### Home Monitoring

The fourth key element, Home Monitoring, stresses evaluating and documenting the performances of the parents of young bilingual children enrolled in Project P.I.A.G.E.T. Both long term (i.e., summative evaluation) and

week-to-week and month-to-month (i.e., formative evaluation) document the impact of the Home Component.

Parent's Monitoring (Summative). There are two different types of pre-post monitoring completed with parents. These summative forms are the Alpern-Boll Developmental Profile (ABDP) and the Yawkey Test for Bilingual Parent's Routines with Their Children (YTBR).

The ABDP is a normed developmental profile which is given to parents concerning their children's growth levels. It is published and marketed by Psychological Development Publications. Reliability and validity coefficients and descriptive information on the normed populations are found in the extensive manual to the test. The test contains five sub-batteries -- each one corresponding to a critical area of the child's development: physical age, self-help age, social age, academic age, and communication age. The parents are asked questions about their child's development in each of these areas. The questions are very specific, reflect whether her child could or could not perform identified behaviors at particular ages, and determine the parent's perceptions of her child's growth. After the behavioral statements are read, the parent indicates whether or not her child has mastered it. If the parent perceives that the child does the behavioral action, the child is credited with "passing" it. If the parent says that her youngster cannot perform the action, the child is credited with "failing" it (and awarded no growth points). Each of the items that are "passed" is worth either "two" or "four" growth months; the months are summed per critical developmental area. The resulting total in each of the five critical developmental areas approximates the parent's perception and expectancies of her child's growth in that area in years and months. In turn, these data are used to calculate differential growth areas for each child. The total administrative time per setting is two hours or 120 minutes.

The YTBR was another instrument developed under a grant to this Principal Investigator from the Patton Foundation. Used in Project P.I.A.G.E.T., it evaluates the quality and quantity of parent routines completed with children in home and community settings. Reliability statistics on the YTBR range from .85 to .89 depending on year of administration. There are 50 questions focusing on the things that parents and children do together -- e.g., "You read your child story books at home." The parent is asked to mark whether she does this routine "always," "regularly," "sometimes," or "never" with her child. The parent is then required to choose one of the four forced choice responses. The range of points per parent is 50 to 200 with each of the 50 items scored using one point (for "never"), two points (for "sometimes"), three points (for "regularly"), and four points (for "always") based on Likert scaling. For one administration, the total time is 60 minutes.

Aide/Parent and Parent/Child Monitoring (Formative). For week-to-week and month-to-month monitoring in the Home Component, two formative observation techniques are used: Aide with Parent (Johnson, 1985a) and Parent with Child Systematic Observations (Johnson, 1985b).

Monitoring using the Aide with Parent (Johnson, 1985a) instrument, assesses the quality and quantity of interaction between the P.I.A.G.E.T. aide and parent. It also checks on the implementation of the HMLC. In Figure 6, is an example of this particular monitoring instrument (all page 35).

Monitoring with the Parent with Child (Johnson, 1985b) instrument, shows what the parent does with the child in a home learning setting. In addition, this monitoring instrument documents the parent's use of the teaching plans with the child and evaluates the impacts of the aide's training of the parents. Figure 7 shows an example of this instrument (see page 36).



Both of these formative home monitoring instruments are scored in exactly the same way as the systematic observation instrument used in the classroom with teacher and aide. (See the description for scoring of these instruments in Staff's Monitoring section of this paper.)

### Conclusion

The P.I.A.G.E.T. Classroom and Home Programs are dynamic and usable as documented by its regional targeted adoptions and in selected nationwide agencies across the United States. Based on theoretical assumptions of Piaget and its own research studies to determine its impacts, the Classroom and Home Components of the program impact significantly both young children's English language and conceptual growth and their parent's expectations and attitudes toward their children.

The key elements of the Classroom Component consist of curriculum, instructional strategies used by the staff, Daily Activity Plans, and Daily Observation Cards and Monitoring. The key elements of the Home Component are Home Mastery Learning Cycle, Curriculum, Home Visit Report and Monitoring.

Working in conjunction with each other, the Classroom and Home Components bridge school and home and show how both institutions, school and family, can ultimately impact the young child.

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**Table 1**  
**FOR THREE YEAR OLDS**  
**Daily Activity Plan (DAP)<sup>1</sup>**  
**P.I.A.G.E.T. Program<sup>2</sup>**

**1. General Information:**

- A. Time: Free choice time
- B. Place: Any table, floor area, or water table
- C. Children: Groups of two to five children

**2. Objectives:**

- A. Given a variety of common objects, the children will predict which of the things will float or sink.
- B. Given a variety of objects, a plastic dish pan with water (or a water table), the children will be able to identify which things float or sink. (physical knowledge)

**3. Materials:**

Common ones such as a sponge, small rock, cork, small wooden block, ball, metal spoon, sea shell, leaf, feather. (Put all the objects in a bag. You will surprise the children as you pull one object at a time from the bag.)

**4. Presentation:**

- A. Introduction: "Today we have a very special activity. There are different things in this bag that I will share one by one. Please tell me which of these things will stay on top of the water and which of them will sink in water."
- B. Procedure:
  - 1. Introduce the words sink and float to the children.
  - 2. Ask the children to predict which objects will float or sink.
  - 3. Encourage each child to predict whether the things will float or sink when placed in water.
  - 4. Ask the children to test their predictions.

**5. Extension:**

- A. Physical knowledge: The children choose additional objects from the classroom that they would like to test in the water. They predict first if the object will sink or float.)
- B. Social knowledge: The youngsters "Experience" and use the words sink and float and will be able to understand their meaning.

**6. Evaluation:**

- A. Daily Observation Cards: Physical knowledge (See following DOC for three year olds)
- B. Comments and Suggestions:

<sup>1</sup> Peters, D. L., Neisworth, J. T. & Yawkey, T. D. (1985). Early childhood education: From theory to practice. Belmont, California: Brooks/Cole Publishers.

<sup>2</sup> DAP examples written by: Juan R. Morales-Flores, Early Childhood Teacher and Graduate Assistant for the P.I.A.G.E.T. Program, Fall, 1989.

TABLE 2

## FOR THREE YEAR OLDS

Daily Observation Card (DOC)<sup>1</sup>

2

## P.I.A.G.E.T. Program

## Objectives

| Physical Knowledge<br>(Knowledge Area) | Observes | Explore Objects | Predicts Outcomes | Follows Through<br>and Tests Objects | Verbalizes<br>Outcomes |  | Date: <u>Sept. 20</u><br>Teacher: <u>Mrs. Robles</u>             |
|--|----------|-----------------|-------------------|--------------------------------------|------------------------|--|--|
| Sink or Float<br>(Activity Title)      |          |                 |                   |                                      |                        |  |  |
| 3 year olds                            |          |                 |                   |                                      |                        |  |  |
| Child's Name                           |          |                 |                   |                                      |                        |  | Comments   |
| 1. Janet Kline                         | 1        | 1               | 1                 | 1                                    | 1                      |  | Great job!   |
| 2. Tong Hu                             | 1        | 1               | 1                 | 1                                    | 1                      |  | Great job! Shows difficulty pronouncing "sink" in English.       |
| 3. Linda Smith                         | 1        | 2               | 1                 | 4                                    | 1                      |  | Showed distress at getting wet.                                  |
| 4. Tai-Wei Lee                         | 1        | 3               | 3                 | 3                                    | 3                      |  | Shows interest but appears very shy.                             |
| 5. Mick Rivera                         | 3        | 1               | 1                 | 3                                    | 1                      |  | Needs practice in following directions and waiting for his turn. |

## Mastery Scale:

- 1 - Mastery (above 60% level)
- 2 - Partial Mastery (at or below 60% level)
- 3 - Mastered With Assistance
- 4 - Did Not Master

<sup>1</sup> Peters, D. L., Neisworth, J. T. & Yawkey, T. D. (1985). Early childhood education: From theory to practice. Belmont, California: Brooks/Cole Publishers.

<sup>2</sup> DOC examples written by: Juan R. Morales-Flores, Early Childhood Teacher and Graduate Assistant for the P.I.A.G.E.T. Program, Fall 1989.

**Figure 1****Listing of Major Teaching Strategies**

- Strategy 1:** Determine Cognitive Developmental Levels
- Strategy 2:** Create Stimulating Environment
- Strategy 3:** Diagnose Levels of Language and Conceptual Development
- Strategy 4:** Follow Daily Activity Plan Dependent Upon Child's Entering Behavior
- Strategy 5:** Use Concrete Objects for Language and Conceptual Development
- Strategy 6:** Provide Active Experiences for Language and Conceptual Development
- Strategy 7:** Use Constructive and Sociodramatic Play
- Strategy 8:** Match Active Experiences With Cognitive, Affective, and Psychomotor Development
- Strategy 9:** Meet Individual Needs
- Strategy 10:** Provide Positive Reinforcement
- Strategy 11 :** Request Completion of Prescribed Activities
- Strategy 12:** Provide Language Substitution Patterning Drills
- Strategy 13:** Use Replacement Patterning Drills for Language Practice
- Strategy 14:** Employ Visual Stimuli and Questioning for Language and Conceptual Development
- Strategy 15:** Use Non-Visual Stimuli for Language and Conceptual Development
- Strategy 16:** Develop Language Memory and Recall Through Questions About Objects and Experiences
- Strategy 17:** Employ Directed Dialogue for Oral Language Development
- Strategy 18:** Monitor Verbal Responses
- Strategy 19:** Provide Students With Choices of Activities
- Strategy 20:** Determine Interests and Needs
- Strategy 21:** Provide Objects and Events That Give Feedback to Children
- Strategy 22:** Provide Social Feedback for English Language and Conceptual Development



**"Systematic Observation Ratings of  
P.I.A.G.E.T. Teacher/Aide in Classroom  
Settings"**



Teacher Teacher Aide  
(circle one)  
Subject \_\_\_\_\_  
Date \_\_\_\_\_  
Time \_\_\_\_\_  
Observer \_\_\_\_\_

**CLASSROOM: TEACHER/AIDE**

|  |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|
| Date _____   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             | TOTAL<br>FREQUENCY |
| Time _____   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| Observer _____   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             | TOTAL<br>DURATION  |
|  |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| I. TEACHER BEHAVIOR  |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| No.<br>Obs/Record  | 1<br>10/10 | 2<br>10/10 | 3<br>10/10 | 4<br>10/10 | 5<br>10/10 | 6<br>10/10 | 7<br>10/10 | 8<br>10/10 | 9<br>10/10 | 10<br>10/10 | 11<br>10/10 | 12<br>10/10 | 13<br>10/10 | 14<br>10/10 | 15<br>10/10 |                    |
| 1. Absent  |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 2. Unavailable   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 3. Teacher-Teacher Aide-Teaching                                   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 4. Teacher-Teacher Aide-Non-Teaching                               |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 5. Teacher - Adult Interaction                                     |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 6. Teacher Observes Classroom                                      |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 7. Teacher Observes Individual Child                               |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 8. Teacher Assesses Individual Child                               |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 9. Teacher Uses D.A.P.   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 10. Teacher Permits Off Task Behavior                              |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 11. Tchr. Uses Objects to Promote Lrng.                            |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 12. Teacher Permits Choices of Child                               |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 13. Teacher Promotes Feedback Learning                             |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 14. Teacher Structures Play  |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 15. Teacher Co-plays   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 16. Teacher Reinforces Child                                       |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 17. Teacher Reprimands   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 18. Teacher Takes Over   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 19. Tchr. Mismatches Cogn. Level                                   |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 20. Teacher Uses Piagetian Motivators                              |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 21. Teacher Encourages Inquisitiveness<br>and Explanatory Activity |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 22. Teacher Uses Language Drill                                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |
| 23. Teacher Uses Language Substitute<br>Patterning                 |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                    |

**Figure 2**

**Monitoring Example for P.I.A.G.E.T. Classroom Staff**

Teacher Teacher Aide  
(circle one)

Subject \_\_\_\_\_

Date \_\_\_\_\_

Time \_\_\_\_\_

Observer \_\_\_\_\_

CLASSROOM: TEACHER/AIDE

"Systematic Observation Ratings of  
P.I.A.G.E.T Teacher/Aide in Classroom  
Settings"

Page 2

| Date _____<br>Time _____<br>Observer _____                    |  | No.<br>Obs./Record | 1<br>10/10 | 2<br>10/10 | 3<br>10/10 | 4<br>10/10 | 5<br>10/10 | 6<br>10/10 | 7<br>10/10 | 8<br>10/10 | 9<br>10/10 | 10<br>10/10 | 11<br>10/10 | 12<br>10/10 | 13<br>10/10 | 14<br>10/10 | 15<br>10/10 | TOTAL<br>DURATION | TOTAL<br>FREQUENCY |
|---|--|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------|--------------------|
| I. TEACHER BEHAVIOR (continued)                               |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 24. Teacher Uses Replacement Drill                            |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 25. Teacher Uses Replacement Patterning                       |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 26. Teacher Uses Elaborative Language Teaching                |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 27. Teacher Uses Open Inquiry Methods                         |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 28. Teacher Asks Closed (e.g. yes/no) Questions               |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 29. Teacher Uses Nonverifiable Questions                      |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| II. CURRICULAR CONTENT  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 1. Movement   |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 2. Arts/Crafts  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 3. Social Studies   |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 4. Science  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 5. Reading  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 6. Language Arts  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 7. Math   |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| III. PUPIL CONTEXT  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 1. Entire Class   |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 2. Group  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 3. Individual   |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| IV. CHILD RESPONSE  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 1. Positive   |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 2. Negative   |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| 3. Neutral  |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |
| Prepared by:<br>Dr. James E. Johnson<br>Penn State University |  |                    |            |            |            |            |            |            |            |            |            |             |             |             |             |             |             |                   |                    |

Prepared by:  
Dr. James E. Johnson  
Penn State University

Figure 2 (con't.)

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| <b><u>HMLC Training Steps<br/>and Step Titles</u></b>         | <b><u>Recommended<br/>Time Allotments</u></b> |
|---|---|
| 1. Step 1: "Summarizing and Reporting from the Previous Week" | 5 minutes                                     |
| 2. Step 2: "Explaining the Current Session's Plan"            | 10 minutes                                    |
| 3. Step 3: "Modeling the Plan <u>for</u> the Parent"          | 15 minutes                                    |
| 4. Step 4: "Modeling the Plan <u>by</u> the Parent"           | 15 minutes                                    |
| 5. Step 5: "Extending the Plan to Non-Home Settings"          | 5 minutes                                     |

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**Figure 3**

**Training Steps of the HMLC and Recommended time Segments Per Step**

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**Plan Number 1**

1. Unit 1: Mathematics (Curriculum Area I)
  2. Title: [HMLC]Step 2] "Counting in English"
  3. Objective: [HMLC Step 3] Count 1-10 Objects Accurately in English
  4. Procedure: [HMLC Step 4] The parent with the child:
    - a. places numbers on objects 1-10 and lets the child count them.
    - b. makes cookies and counts to 10 to place them in containers.
    - c. does a finger play that uses counting 1-10.
  5. Extension: [HMLC Step 5] Outside the home, the parent:
    - a. in the car, encourages the child to count cows, horses (an animal) as they travel.
    - b. in the car, play the license plate game (count all out-of-state plates).
    - c. at the mall, the child counts the stores they see.
- 

**Figure 4**

**Example of Home Curriculum and HMLC Correspondence**

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**FOR AIDES WORKING WITH PARENTS OF THREE YEAR OLDS**
**Home Visit Report (HVR)<sup>1, 2</sup>**

Child's Name \_\_\_\_\_ Address \_\_\_\_\_ Phone \_\_\_\_\_

Parent's Name \_\_\_\_\_ School \_\_\_\_\_

Date \_\_\_\_\_ Home Visitor \_\_\_\_\_

| Objectives of Visit<br><u>Objectives of Visit</u>          | Materials/Areas<br><u>Covered</u>   | Comment/Observations/Evaluation<br><u>of Visit</u>   |
|--|---|--|
| 1. To summarize last last week's activity                  | 1. big bowl with water, a leaf a wooden spoon, a sponge (Other objects, suitable for the activity, available at the house). | 1. Ms. Rivera did the activity three times.  |
| 2. To review objectives for this week's activity.          |   | 2. She seemed to understand the new activity's objectives.   |
| 3. To model the activity using the parent as child.        |   | 3. Ms. Rivera was being distracted by TV show. I asked her to please turn off the TV set while we modeled. |
| 4. To have the parent model the activity with me as child. |   | 4. Good job of modeling the activity; use of questioning reviewed for the parent.                          |
| 5. To extend the activity to other settings and locations. | 5. at Aunt Lucy's house, at the nearby pond, with modifications   | 5. She came up with very good ideas for extending the activity from home to home-related settings.         |
| 6. To review and answer questions.                         |   | 6. Said she would try them with Mick.  |

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**To Be Filled In by the Parent**

Time of Arrival \_\_\_\_\_ Time of Departure \_\_\_\_\_

Parent's signature \_\_\_\_\_

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<sup>1</sup>HVR (1981) developed by the P.I.A.G.E.T. Program, Bethlehem Area School District, Bethlehem, PA and The Pennsylvania State University, University Park, PA.

<sup>2</sup>HVR examples written by: Juan R. Morales-Flores, Early Childhood Teacher and Graduate Assistant for P.I.A.G.E.T. Program, Fall, 1989.

**Figure 5**
**Example of a Completed HVR for the "Floating and Sinking" Concept**



Setting \_\_\_\_\_  
 Parent Aide \_\_\_\_\_  
 Parent \_\_\_\_\_  
 Date \_\_\_\_\_  
 Time \_\_\_\_\_  
 Observer \_\_\_\_\_

HOME: AIDE/PARENT

"Systematic Observation Ratings of P.I.A.G.E.T.  
 Aide with Parent in Home Settings"

| Ho. Obs.<br>Record                          | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | TOTAL<br>DURATION | TOTAL<br>FREQUENCY |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|--------------------|
|   | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 |                   |                    |
| <b>I. PARENT/AIDE BEHAVIOR</b>              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 1. Reinforces                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 2. Reprimanding                             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 3. Condescending                            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 4. Highly Directive                         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 5. Complaining                              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 6. Inattentive                              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| <b>II. PARENT/AIDE BEHAVIOR</b>             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 1. Corrects                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 2. Off Task                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 3. Uses WVR                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 4. Uses Gaming Strategies                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 5. Uses Concrete Materials                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 6. Gives Parents Choices                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 7. Promotes Feedback Learning               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 8. Informs                                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 9. Gives Concrete Examples                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 10. Incomplete Communicative Acts           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 11. Seeks Self Feedback                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 12. Demonstrates                            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 13. Uses Open Questions                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 14. Encourages Parent to Use Open Questions |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 15. Uses Prospection with Parents           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 16. Uses Construction Probes                |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 17. Uses Hypothetical Strategies            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |

Figure 6  
 Monitoring Example for P.I.A.G.E.T. Aide With Parent



Setting \_\_\_\_\_  
 Parent Aide \_\_\_\_\_  
 Parent \_\_\_\_\_  
 Date \_\_\_\_\_  
 Time \_\_\_\_\_  
 Observer \_\_\_\_\_

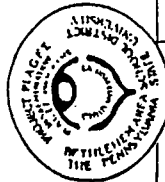
HOME: AIDE/PARENT

P.2  
 "Systematic Observation Ratings of P.I.A.G.E.T.  
 Aide with Parent in Home Settings"

|  |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
|--|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|--------------------|
| Date _____                                   | No. Obs.<br>Record | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | TOTAL<br>DURATION | TOTAL<br>FREQUENCY |
| Time _____                                   |                    | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 |                   |                    |
| Observer _____                               |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| III. PARENT/AIDE BEHAVIOR                    |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 1. Asks Parents to Summarize                 |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 2. Explains Objectives                       |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 3. Describes Play Routine                    |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 4. Engages Parent in Role Playing            |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |
| 5. Engages Parent in Extending Play Routines |                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |

Figure 6 (con't.)

Prepared by: Dr. James E. Johnson, Penn State University



Setting \_\_\_\_\_  
Parent \_\_\_\_\_  
Child \_\_\_\_\_  
Date \_\_\_\_\_  
Time \_\_\_\_\_  
Observer \_\_\_\_\_

HOME: PARENT/CHILD

"Systematic Observation Ratings of  
Parent With Child in Home Settings"

| No. Obs.<br>Record                                     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | TOTAL<br>DURATION | TOTAL<br>FREQUENCY |  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|--------------------|--|
|  | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 | 10/10 |                   |                    |  |
| <b>I. SOCIAL BEHAVIOR</b>                              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 1. Praises   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 2. Disapproves with specific feedback                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 3. Disapproves with feedback                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 4. Reprimands  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 5. Uses Piagetian Motivators                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 6. Bosses  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 7. Inattentive   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 8. Structures Play                                     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 9. Co-Plays  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 10. Displays Physical Affection                        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| <b>II. INSTRUCTIONAL BEHAVIOR</b>                      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 1. Mismatches cognitive level                          |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 2. Encourages inquisitiveness and exploratory activity |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 3. Instructional take-over                             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 4. Permits off task behavior                           |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 5. Uses concrete objects                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 6. Permits choices by child                            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 7. Promotes feedback                                   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 8. Asks open questions                                 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 9. Asks yes/no questions                               |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 10. Promotes constructive play                         |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 11. Uses nonverifiable questions                       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 12. Uses directives                                    |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 13. Uses modeling                                      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| <b>III. CHILD RESPONSE</b>                             |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 1. Attentive   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 2. Acts Independently                                  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 3. Distracted  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |
| 4. Rejecting   |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                   |                    |  |

Prepared by: Dr. James E. Johnson, Penn State University

Figure 7

Monitoring Example for Parent Working with the Child